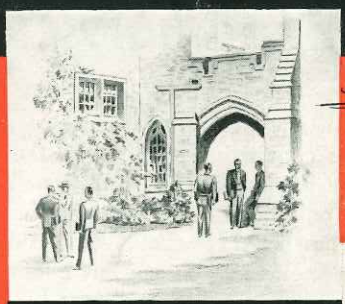
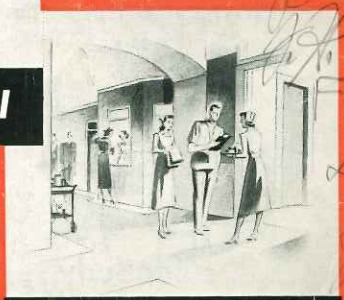
BAUSCH & LOMB

Dynoptic

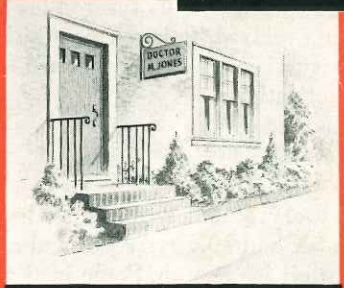
MEDICAL Microscopes



Medical School



Internship



Practice

Lifetime Partner for Your Medical Career

The World's Finest Medical Microscopes

Before Buying a Microscope...

You should know that...

The very fact that medical schools require entering students to have microscopes is convincing evidence of the importance of this instrument in your chosen profession. You will use it continually, not only during your training but it will truly be your trusted partner throughout your medical career. And it is good to know that you can buy a microscope now at the start of your career which will be adequate for all your routine requirements throughout your practice.

You should earnestly consider purchasing an instrument of your own and in so doing will want to be familiar with a few features which will make it most valuable to you.

Binocular Body

For visual use a microscope with a binocular body and twin eyepieces is by far the most satisfactory and is steadily replacing the monocular type for routine use. Examinations are made in a relaxed, fatigue-free position, with both eyes as in ordinary vision, and the inclined eyepiece tubes prevent muscular fatigue.

Eyepieces and Objectives

Practically every school requires students to have microscopes with 5X and 10X eyepieces and at least three objectives, one an oil immersion. Some institutions do prescribe an extra objective, in the lower group.

Built-on Mechanical Stage

The mechanical stage is usually required, experience having proved that it is highly desirable to have your microscope fitted with the ungraduated type.

Variable Focus Condenser

Of particular value is the Variable Focus Substage Condenser available only on Bausch & Lomb instruments. This feature permits instant change of illumination for objectives of different magnifications—at the mere turn of a knob. With the Variable Focus Condenser no time is lost in taking off or putting on the upper element (as with the Abbe), it is attached to the underside of the stage and the lower element focused by the knob on the rack and pinion substage. Users report a very substantial increase in usable illumination in the intermediate and lower powers. The condenser will satisfactorily fill the field of any objective from 48mm to oil.

Leatherette Carrying Case

Of course, you will need a carrying case and, therefore, will want to own the blue leatherette-covered professional style. Not only can this be used for transporting the instrument but for safe, clean storage.

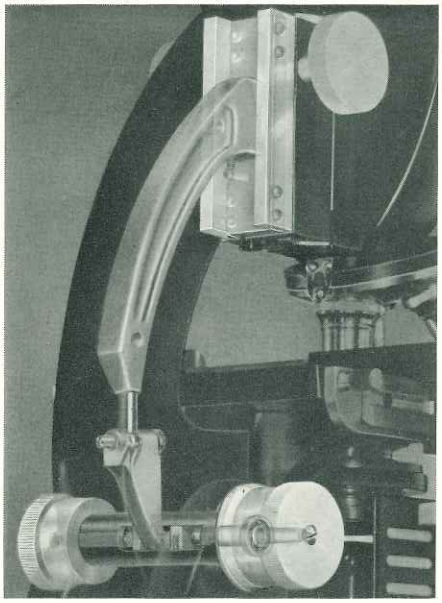
What Make to Buy

In choosing your microscope you should carefully consider just what you are getting for your money. You want the very latest features of microscope design, you want the manufacturer to be one highly regarded for integrity in its dealings and with prospects of continuing in business ready to render you service throughout your medical career. Bausch & Lomb Medical Microscopes are made by a company which enjoys the very highest reputation for fair dealing, and these fine instruments possess features found in no other medical microscopes.

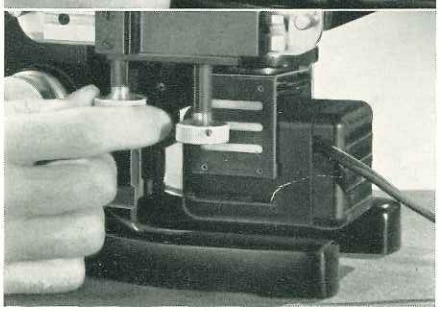
A few of these features are described on the opposite page.

Only B&L Medical Microscopes Give You All These Performance Advantages

In the Bausch & Lomb *Dynoptic* Medical Microscope these tested features assure better performance, greater comfort and convenience in operation; and longer, more useful life.

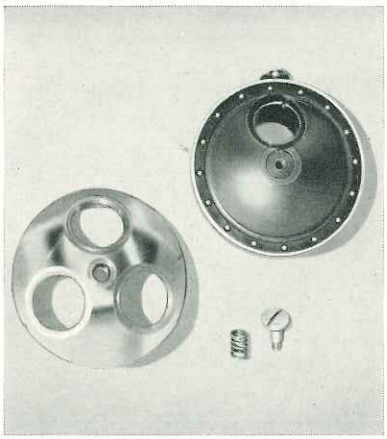


Ball bearings and rollers for most precise, effortless fine focusing.

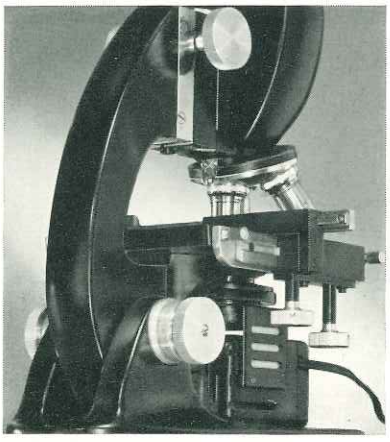


Comfortable, low position fine focus and mechanical stage controls.

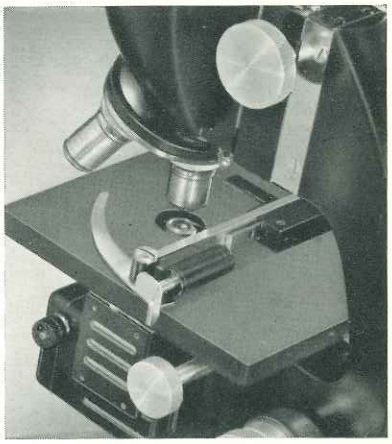
Tuning fork bracket keeps mirror steady but permits instant removal.



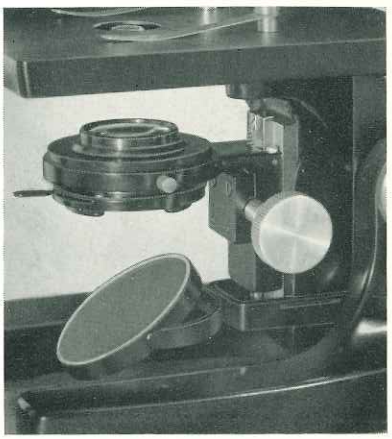
Friction-free, ball-bearing, ball-stop nosepiece for exact repeats.



Straight-line location of main controls prevents operator's fatigue.



Vacuum-controlled spring cushions finger against slide three ways.



Variable Focus Condenser—Coordinates condenser and objective N.A.'s.

Quick on-or-off Opti-lume integral illuminator uses standard lamp.

TBV-48

Inclined binocular body, interchangeable with monocular tube.

Parallel eyepiece tubes.

Rack and pinion coarse focusing adjustment.

Ball-bearing and roller, low position fine focusing adjustment.

Ball-bearing, ball-stop, precentered, triple nosepiece.

Removable, ungraduated mechanical stage, with vacuum-controlled spring slide holder.

Rack and pinion substage with full 360° ring mount, iris diaphragm, and either Variable Focus or Abbe Condenser.

Plano-concave mirror in quick on-and-off bracket.

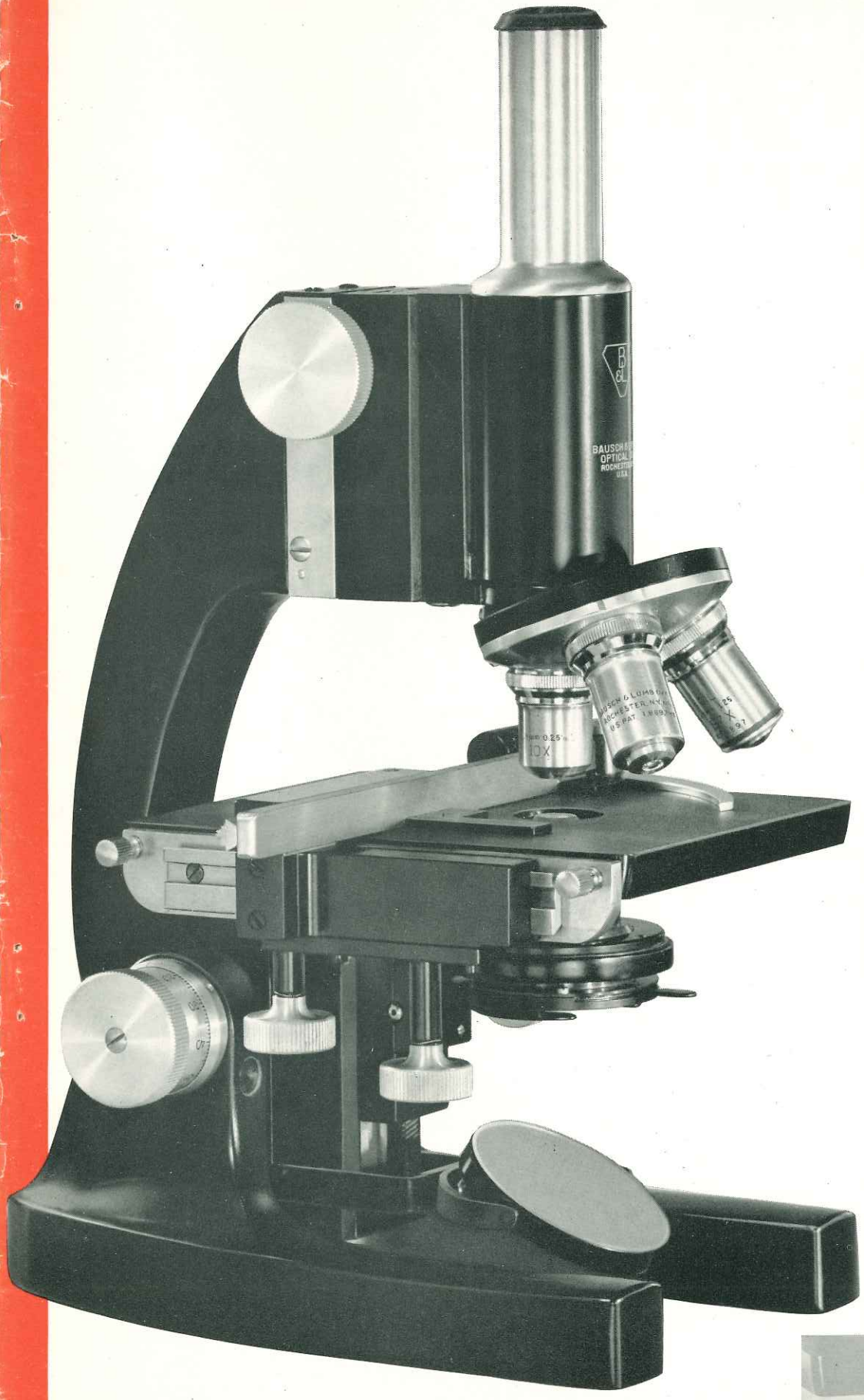
Leatherette-covered, professional type, horizontal carrying case.

Achromatic objectives: 10X, 16mm; 43X, 4mm; and 97X, 1.8mm.

Paired Huygenian eyepieces, 5X and 10X.

With Variable Focus Condenser, order TBV-48 **$558.00**

$551.00 **With Abbe Condenser, order TBR-48**



FBV-48

- Vertical monocular tube, not interchangeable.
- Rack and pinion coarse focusing adjustment.
- Ball-bearing and roller, low position fine focusing adjustment.
- Ball-bearing, ball-stop, precentered, triple nosepiece.
- Removable, ungraduated mechanical stage with vacuum-controlled spring slide holder.
- Rack and pinion substage with full 360° ring mount, iris diaphragm, and either Variable Focus or Abbe Condenser.
- Plano-concave mirror in quick on-and-off bracket.
- Leatherette-covered, professional type, horizontal carrying case.
- Achromatic objectives: 10X, 16mm; 43X, 4mm; and 97X, 1.8mm.
- Huygenian eyepieces, 5X and 10X.

With Variable Focus Condenser, order FBV-48 **$351.00**

With Abbe Condenser, order FBR-48 **$344.00**

Variations

To meet specific requirements of Medical Schools and individual preferences of students

The models illustrated and described on the two preceding pages are those most commonly bought by entering medical students. However, in order to comply with varied entrance requirements and the personal preferences of students, provision has been made to vary specifications and alter equipment to meet practically any need.

For instance, in the above illustrations the one on the left shows the monocular model with plain stage, three objectives and Abbe condenser—a variation of the FBV-48.

The monocular model on the right has removable, ungraduated mechanical stage, three objectives, Abbe condenser, and Opti-lume integral substage illuminator—another variation of the FBV-48.

Low Power Objectives

Occasionally, it is necessary to have an objective magnification of less than 10X. Your Bausch & Lomb Microscope can be purchased with a divisible 10X objective which, by unscrewing the lower section, gives a magnification of 4X with a large field. The substitution of this divisible objective for the 10X non-divisible listed with the microscopes on pages 4 and 5 does not alter the cost. Just specify if the divisible is wanted.

Some medical schools require the student to have a four-objective microscope which is the same as the models previously described except for the addition of a 3.5X, 30mm achromat to the 10X, 43X, and 97X equipment, and the substitution of a quadruple for the triple nosepiece. Including the added cost of the quadruple nosepiece, this change adds $24.00 to the prices shown on the two preceding pages. If the required extra objective is other than 3.5X, the added cost can be found on the next page under "Other Objectives."

Vertical Cabinet

Medical students usually buy their microscopes in the leatherette-covered horizontal carrying case listed on pages 4 and 5. If you do not want this case, but prefer the hardwood vertical cabinet with handle, lock and key, deduct $5.00 from the prices on those pages.

Mirror or Illuminator

You can buy your Bausch & Lomb Microscope with either an Opti-lume, attachable, integral, substage illuminator with blue glass filter, or with plano-concave mirror for use with independent light source as listed on pages 4 and 5. In case you want the Opti-lume and not the mirror, specify. If the TBV-48 is ordered there is an added charge of $2.00, whereas, if the FBV-48 is wanted the price is the same whether it is furnished with mirror or integral illuminator.

Stage Equipment

While the mechanical stage shown in the illustrations on pages 4 and 5 is of the greatest value and preferred by a large majority of users, a plain stage with slide clips can be substituted. This substitution reduces the prices by $42.00. If the mechanical stage shown in the illustrations is desired *with graduations*, the additional cost is $16.00.

Monocular Tube on TBV-48

Some students, either from choice or necessity, buy Model TBV-48 shown on page 4 with a monocular tube instead of binocular body. This permits the later addition of a binocular body and reduces the original cost $178.00. The CBV-48, as this convertible model is designated, costs $380.00. Any equipment options described for either TBV-48 or FBV-48 apply equally to the CBV-48.

ACCESSORIES

For Bausch & Lomb Medical Microscopes

Other Objectives

As a fourth objective some schools require either the 4X, 32mm; 2.6X, 40mm; or 2X, 48mm objective, instead of the 3.5X, 30mm achromat priced on page 6. Prices of these objectives are:

4X, 32mm—$14.00

2.6X, 40mm—$13.00

2X, 48mm—$13.00

Quadruple in place of triple nosepiece—$3.00

Complete information on these objectives or others in which the purchaser may be interested can be obtained from Bausch & Lomb catalog D-184.

Hemacytometer

The Bausch & Lomb Hemacytometer is of one-piece construction, made of special well-seasoned glass with initial accuracy maintained. Special attention is paid to grinding and polishing the counting chamber so that its depth is correct and uniform.

Ruling of the counting area is very precisely done. The cross section of the ruling is of special shape, to give the lines high visibility.

Dependable counts are assured in critical diagnosis. In leatherette-covered case, with two pipettes and two cover glasses.

Model No. 31-75-68-84, with double Neubauer ruling, $16.00.

Model No. 31-75-65-84, with Bass-Johns ruling, one pipette; 1:100, $17.00.

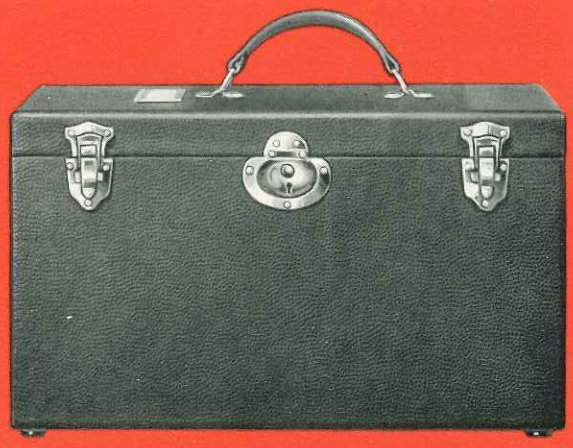
Professional Carrying Case

The blue, leatherette-covered carrying case, listed with the equipment on pages 4 and 5, is the horizontal type and will keep all of your equipment in compact, portable form.

Padded stops hold the microscope safely in a horizontal position. A slide box is regularly included and there are convenient spaces for a hemacytometer, extra eyepieces, and objectives.

4X Low Power Objective

Hemacytometer



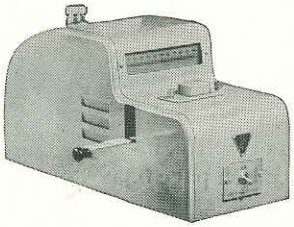
Horizontal Carrying Case

ADDITIONAL OPTICAL EQUIPMENT

Into whatever field your work in medicine may take you, there will be Bausch & Lomb scientific tools to assist you in a successful practice. Here are just a few instruments with which you should become familiar. Literature describing them will be gladly sent you.

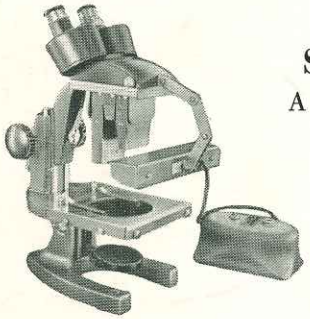
RESEARCH MICROSCOPES

A most complete group of the finest research instruments built to give years of satisfactory performance.



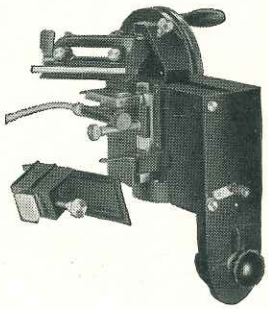
MONOCHROMATIC COLORIMETERS

Higher transmission, greater sensitivity and concentration range are very valuable features.



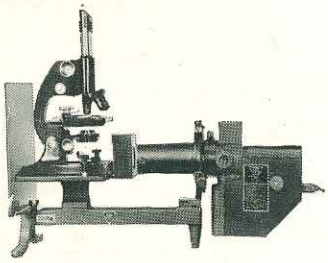
STEREOMICROSCOPES

A complete line of Wide Field instruments, featuring dustproof prism housings, improved optical elements.



CLINICAL MICROTOMES

For rapid, accurate sectioning of frozen, celloidin, and paraffined materials—with freezing attachment or object clamp.



MICRO-PROJECTION EQUIPMENT

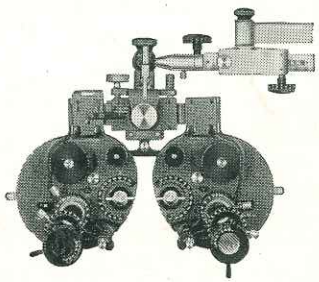
Wide range of types to answer the needs of a diversity of users in education, and general laboratory work.

PHASE CONTRAST ACCESSORIES

Two types of condensers furnish a choice of equipment for this latest microscope technique.

REFRACTOMETERS

Models for every need — from hand to precision — for determination of the refractive index of liquids and solids.



OPHTHALMIC INSTRUMENTS

B&L provides a complete line of instruments and equipment for eyesight examination.

BAUSCH & LOMB OPTICAL CO.

ROCHESTER 2, N.Y., U.S.A.

D-109, 15, Jan. '54, C-H

Printed in U.S.A